

## Conference on Design and Architectures for Signal and Image Processing

October 10-12, 2018

Porto, Portugal

<http://dasip-conference.org>

### General Co-Chairs:

**João MP Cardoso**, University of Porto, PT  
**Emmanuel Casseau**, University of Rennes 1, FR

### Program Co-Chairs:

**Pierre Langlois**, Polytechnique Montréal, CA  
**Eduardo Juarez**, Universidad Politecnica de Madrid, SP

## CALL FOR PAPERS

**Paper Submission Deadline: May 25, 2018**

The Conference on Design and Architectures for Signal and Image Processing – DASIP provides an inspiring international forum for latest innovations and developments in the field of leading edge embedded signal processing systems. The conference program will include keynote speeches, contributed paper sessions, demonstrations, and special sessions on timely topics. Authors are invited to submit manuscripts on topics including, but not limited to:

### Design Methods and Tools

- Design verification and fault tolerance
- Embedded system security and security validation
- System-level design and hardware/software co-design
- High-level synthesis, logic synthesis, communication synthesis
- Embedded real-time systems and real-time operating systems
- Rapid system prototyping, performance analysis and estimation
- Formal models, transformations, algorithm transformations and metrics

### Development Platforms, Architectures and Technologies

- Embedded platforms for multimedia and telecom
- Many-core and multi-processor systems, SoCs, and NoCs
- Reconfigurable ASIPs, FPGAs, and dynamically reconfigurable systems
- Overlay architectures, languages and compilers
- Memory system and cache management
- Asynchronous (self-timed) circuits and analog and mixed-signal circuits

### Custom embedded architectures and systems

- Deep learning architectures for inference and training
- Systems for autonomous vehicles : cars, drones, ships and space applications
- Smart cameras, security systems, behaviour recognition
- Data Center processing : special routing, configurable co-processors and low energy considerations
- Real-time cryptography, secure computing, financial and personal data processing
- Computer arithmetic, approximate computing, probabilistic computing, nanocomputing, bio-inspired computing
- Biological data collection and analysis, bioinformatics
- Personal digital assistants, natural language processing, wearable computing and implantable devices
- Global navigation satellite and inertial navigation systems

### Special Session on Signal Processing and Architectures for 5G Wireless Systems

This Special Session is devoted to the presentation and discussion of advanced signal processing algorithms, novel implementation architectures, design languages and tools that will support the development of 5G wireless communications systems.

### Special Session on Energy-Aware Architectures and Systems for Signal, Image and Video Processing

The goal of this Special Session is to bring together active researchers who are interested in prevailing issues and prominent challenges related to the design of energy-aware architectures and systems for signal, image and video processing.

### DEMO NIGHT

During the DASIP 2018 Demo Night, universities and public research institutes are invited to demonstrate their hardware platforms, prototypes and tools. Authors should submit their full papers (up to 2 pages, double-column IEEE format) in PDF through the web based submission system. Accepted Demo Night papers containing new scientific results have the option to be submitted for inclusion in the IEEE Digital Xplore Library.

## IMPORTANT DATES

Paper submission deadline:	May 25, 2018
Regular paper notification of acceptance:	July 6, 2018
Demo Night paper submission:	June 8, 2018
Demo night papers notification of acceptance:	July 12, 2018
Camera ready papers:	September 7, 2018

## REQUIREMENTS FOR SUBMISSION

### SUBMISSION REQUIREMENTS

Authors should submit their full papers (up to 6 pages, double-column IEEE format) in PDF through the web based submission system (Demo Night - 2 pages). Submitted papers are required to describe original unpublished work and must not be under consideration for publication elsewhere. Submissions must be fully anonymous, but authors should not hide previous work, instead, they need to make self-references in the third person.

Full submission requirements, templates and submission instructions can be found at: <http://dasip-conference.org/submission.html>

### PUBLICATIONS

Each submission will receive at least three independent double blind reviews from the members of our scientific committee. Authors of accepted papers must address those comments in the camera ready version and present it in the conference prior to its publication. The conference proceedings will be published in the IEEE Xplore Digital Library. Paper and keynote presentation slides and tutorial documents will be made available to conference attendees after the conference (subject to confidentiality issues). Authors of the best papers will be invited to submit an extended version of their work to a Journal of Signal Processing Systems special issue.

### TUTORIALS

Proposals for tutorials will be accepted depending on topic relevance and evidence of a comprehensive agenda. A one-page description of the tutorial including title, presenters, contents, and the relevant track(s) should be sent to [dasip2018@easychair.org](mailto:dasip2018@easychair.org)

## SPONSORSHIP OPPORTUNITIES

We offer you the opportunity to sponsor DASIP Conference. With various items and packages available, give your company a higher visibility before and during the event!

For more information, please contact João Canas Ferreira at [jcf@fe.up.pt](mailto:jcf@fe.up.pt)

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